



BLACK & VEATCH

1145 Sanctuary Parkway
Suite 475
Alpharetta, Georgia 30004 USA

Tel: (770) 751-7517
Fax: (770) 751-8322

Black & Veatch Special Projects Corp.

US EPA Region 4
Central Florida Pilot Radiation Assessment

BVSPC Project 48318.6711
BVSPC File C.3
April 9, 2004

Mr. Brad Jackson
Remedial Project Manager
US Environmental Protection Agency, Region 4
11th Floor
61 Forsyth St., SW
Atlanta, GA 30303

Subject: Draft Revised April 2004
Phase I Communication Strategy for
the Central Florida Pilot Radiation
Assessment

Dear Mr. Jackson:

Enclosed are ten copies of the referenced document. Black & Veatch staff have incorporated the comments we received from EPA during our April 2 meeting and subsequent follow-up telephone calls. It is our hope that this strategy reflects those comments as you intended.

As Black & Veatch staff assembled this revised communication strategy, it became clear to us that beginning the flyovers on May 19 does not provide adequate time to prepare the communication and community resources needed to implement an expanded community outreach effort. This effort is necessary to address the likely concerns that will arise when news of the assessment is made public. For this reason, I have enclosed an alternate calendar for your use, which suggests that, at the earliest, the flyovers begin on July 28 and be completed on or about August 11. On this timetable, public notification would occur on July 12.

Please note that, as with our current schedule, the alternate timetable also requires an intense communication and community outreach effort over the several weeks before and then during the flyovers. Black & Veatch community involvement staff believe it is best to get the assessment information out and then the flyovers completed in a timely manner (about 6 weeks from public notification to flyover completion).

However, for this approach to succeed in providing the expanded community outreach described in the current strategy, we need much more time than we have now, ahead of public notification, to assemble and develop the EPA/contractor teams and the relevant information they need to cover the communities in the assessment areas. The tasks that need to be done before public notification include (1) establishing team assignments and communication protocols for persons who will be in the community just before and during the assessment; (2) identifying, establishing, acquiring staff, and equipping a community information center; and (3) developing an electronic information repository or web page, as well as determining protocols for handling updates and



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email inquiries from the community. Also, team members need to clear their schedules to be available during the 6-week public notification and flyover process and make time before this 6-week period to become well versed about the assessment and how to route or address community inquiries, so that the Agency can provide prompt and accurate responses.

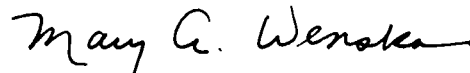
Overall, Black & Veatch suggests that it is more important to prepare EPA resources internally to respond to community concerns and information needs before public notification of the flyovers takes place than it is to extend the public notification before the flyovers begin. In other words, given our strategy's expanded community outreach approach and the importance of conducting public notification and the flyovers in a timely manner, we will cause unnecessary alarm and confusion in the community if we are not prepared with adequate staff and resources, trained and in place locally, to listen to their concerns and questions and to respond efficiently with consistent and accurate information. At the least, since we are aiming for a broad based community outreach effort before the assessment, we can expect that the "awakened" community members will want clear and consistent answers about potential health effects, property value impacts, and the types of follow-on actions that may be needed if elevated radiation levels are found.

Black & Veatch appreciates the opportunity to support the EPA on this important project. We welcome further discussions and planning sessions to identify the resources, timetables, and staff needed to help the Agency and the community become partners in supporting the need for the pilot radiation assessment and later in determining follow-on actions that may be needed.

Please call me at 770-521-8134 if you have a question about this submittal, or if I can be of service in any other way.

Sincerely,

Black & Veatch Special Projects Corp.



Mary A. Wenska

cc: Suzanne Zoda, w/enclosures

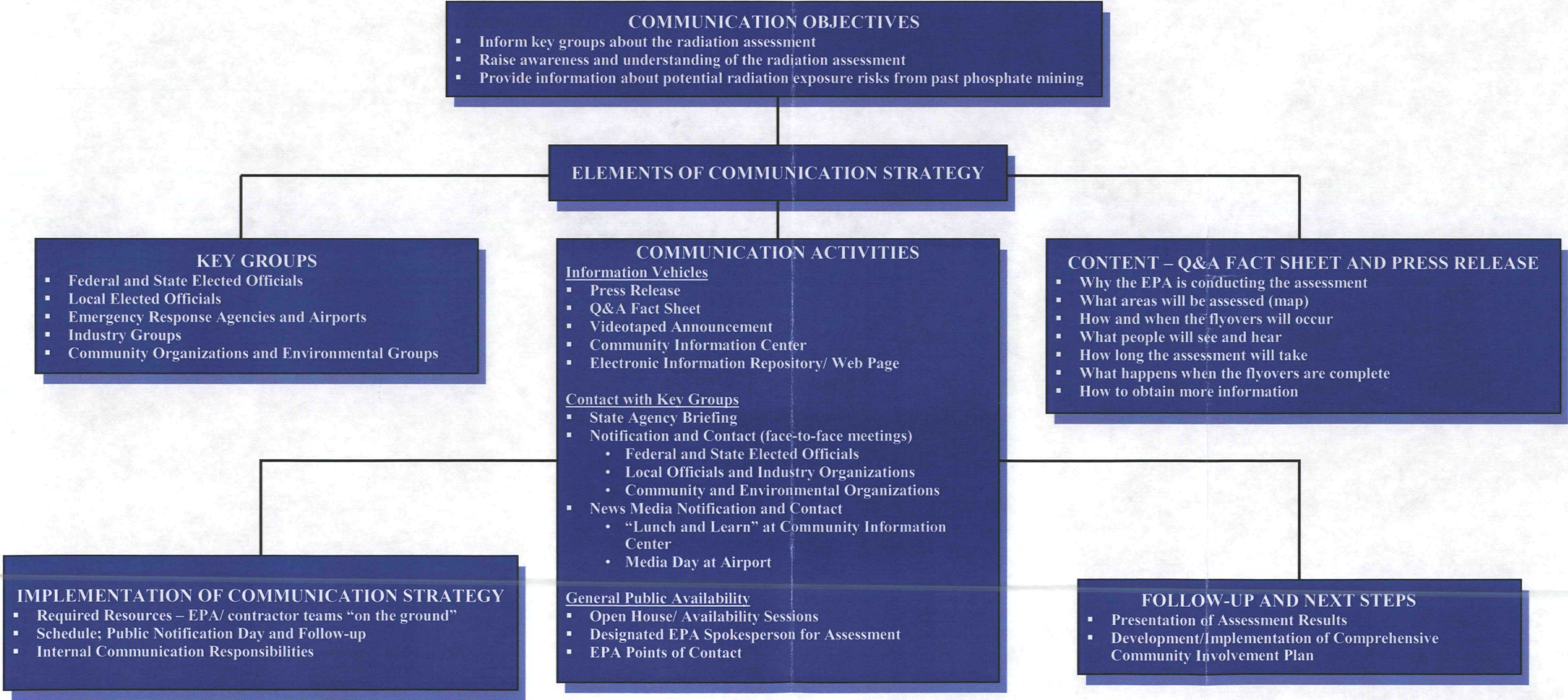
ALTERNATE PUBLIC NOTIFICATION SCHEDULE FOR FLYOVERS

JULY 2004						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8	9	10
11	12 Public Notification Day <ul style="list-style-type: none"> • Community Information Center opens in Lakeland • OCA notifies federal/state elected officials • Q&A fact sheet emailed or fax to local officials and community/env. groups • Press release faxed/emailed • Electronic Info Repository up 	13	14 “Lunch and Learn” Media Session at Community Information Center	15	16	17
18	19 Follow-up phone calls/emails to key county/city officials	20 Follow-up phone calls/emails to key county/city officials	21 Follow-up phone calls/emails to key county/city officials	22 Follow-up phone calls/emails to key county/city officials	23 Follow-up phone calls/emails to key county/city officials	24
25	26 Airport Media Day	27 Follow-up phone calls/emails to key county/city officials	28 Flyovers begin	29	30	31

AUGUST 2004						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11 Flyovers complete	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

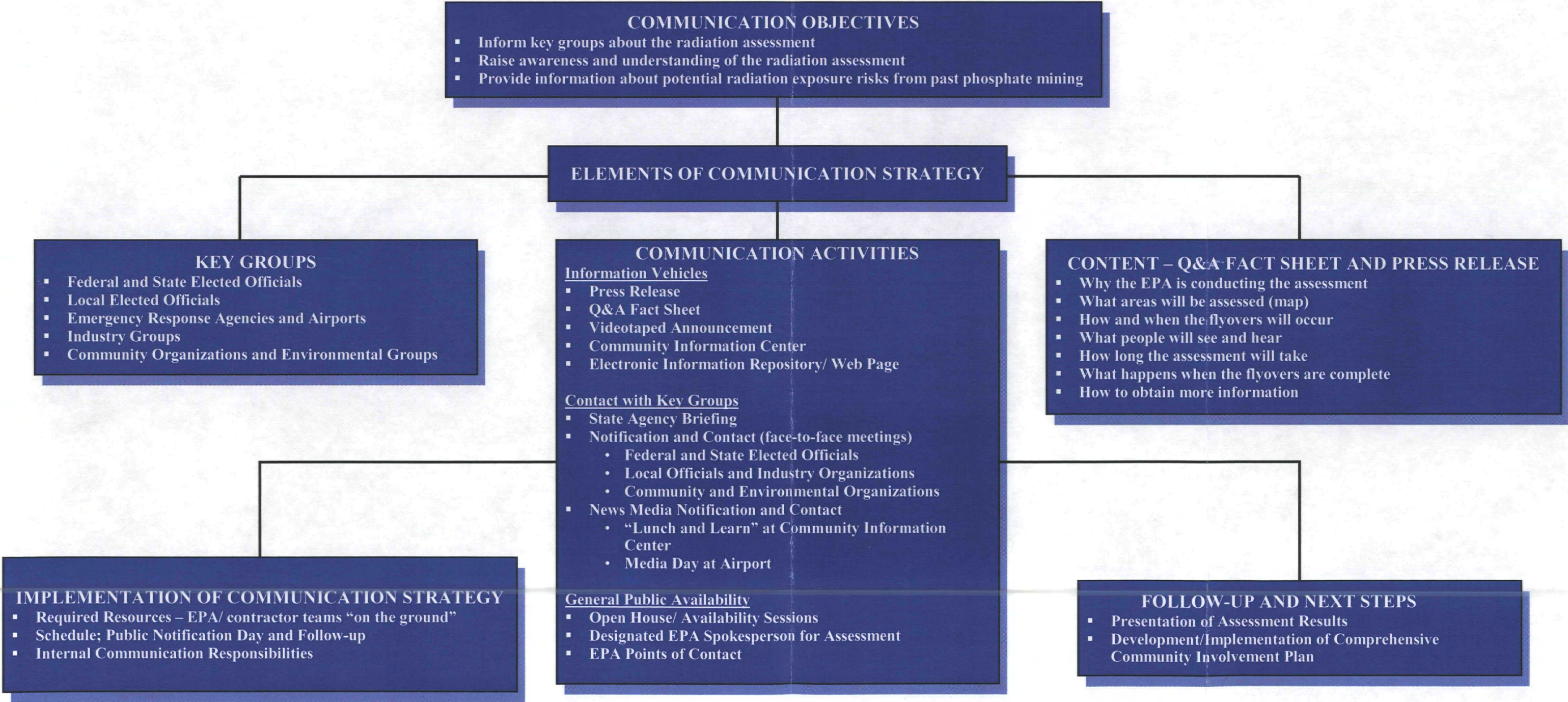
**COMMUNICATION STRATEGY
FOR CENTRAL FLORIDA PILOT RADIATION ASSESSMENT
Phase I – Community Notification and Outreach**

Over the last 3 years, Region 4 has been evaluating the potential for increased radiation levels across the large areas of central Florida where phosphate mining once occurred. As a result, the Agency has chosen, as an initial step, to do a pilot radiation assessment on formerly mined areas that have been redeveloped as residential communities. Assessment results will help to determine areas for further investigation and the potential for chronic health effects from long-term exposures to the radiation.



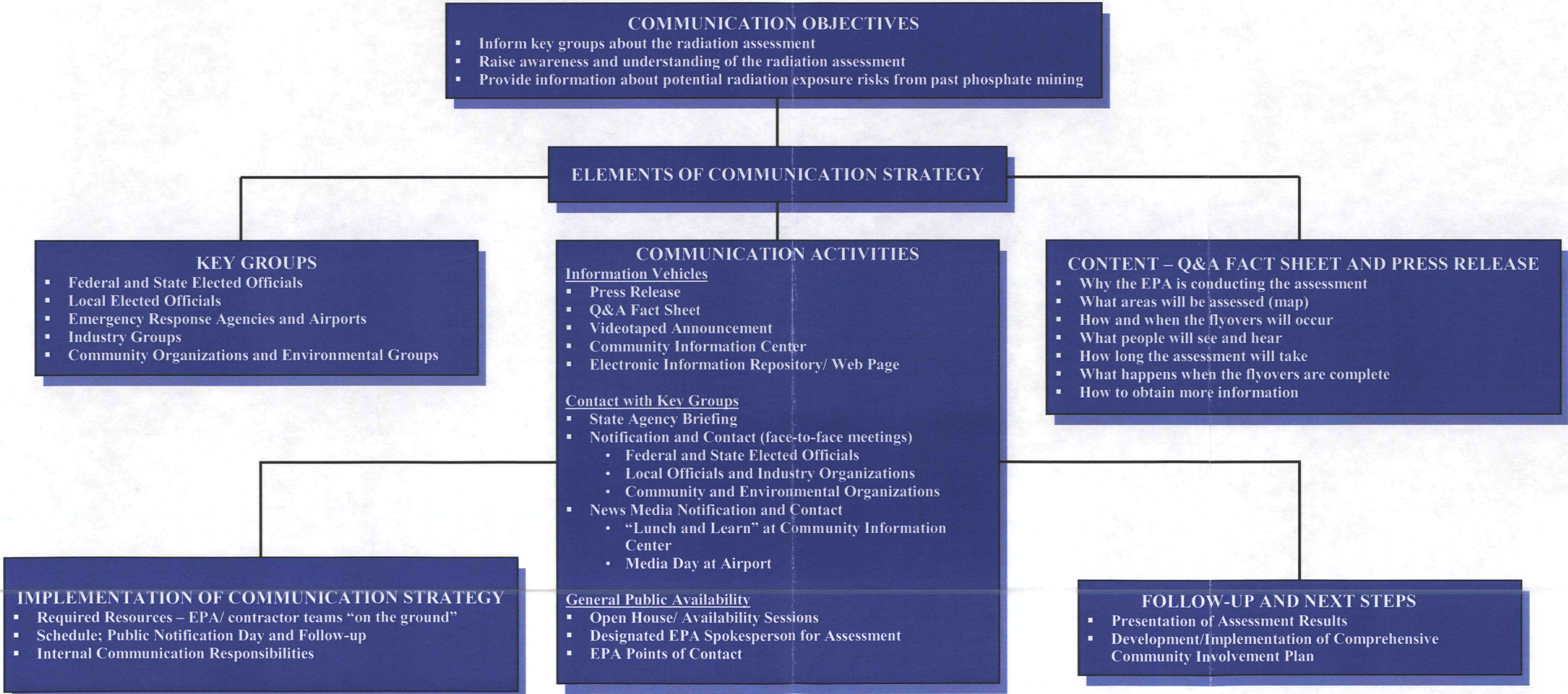
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COMMUNICATION OBJECTIVES

- Inform key groups about the radiation assessment
- Raise awareness and understanding of the radiation assessment
- Provide information about potential radiation exposure risks from past phosphate mining

ELEMENTS OF COMMUNICATION STRATEGY

KEY GROUPS

- Federal and State Elected Officials
- Local Elected Officials
- Emergency Response Agencies and Airports
- Industry Groups
- Community Organizations and Environmental Groups

COMMUNICATION ACTIVITIES

Information Vehicles

- Press Release
- Q&A Fact Sheet
- Videotaped Announcement
- Community Information Center
- Electronic Information Repository/ Web Page

Contact with Key Groups

- State Agency Briefing
- Notification and Contact (face-to-face meetings)
 - Federal and State Elected Officials
 - Local Officials and Industry Organizations
 - Community and Environmental Organizations
- News Media Notification and Contact
 - “Lunch and Learn” at Community Information Center
 - Media Day at Airport

General Public Availability

- Open House/ Availability Sessions
- Designated EPA Spokesperson for Assessment
- EPA Points of Contact

CONTENT – Q&A FACT SHEET AND PRESS RELEASE

- Why the EPA is conducting the assessment
- What areas will be assessed (map)
- How and when the flyovers will occur
- What people will see and hear
- How long the assessment will take
- What happens when the flyovers are complete
- How to obtain more information

IMPLEMENTATION OF COMMUNICATION STRATEGY

- Required Resources – EPA/ contractor teams “on the ground”
- Schedule; Public Notification Day and Follow-up
- Internal Communication Responsibilities

FOLLOW-UP AND NEXT STEPS

- Presentation of Assessment Results
- Development/Implementation of Comprehensive Community Involvement Plan

FLORIDA PHOSPHATE MINING INITIATIVE BRIEFING

April 15, 2004

Purpose: Brief State of Florida on Technical Plans for survey, communication strategy, and implementation schedule.

☐ BACKGROUND

- Large number of Phosphate mining sites in Central Florida
 - Mineable Limit
 - Mandatory Mines
 - Non-Mandatory Mines
 - CERCLIS Sites
- EPA plans target residential areas over formerly mined land.

☐ SURVEY PLANS

- Aerial mapping of radiation levels of residential areas over formerly mined land.
- Survey area estimated at 70,000 acres/110 square miles.
- Survey Altitude 150ft; 14 day survey period
- GIS Mapping of Mining Sites, Residential Areas & Radiation Levels

☐ COMMUNICATION STRATEGY

- Key Groups
 - State/Federal Agencies
 - Elected Officials
 - Community Interest Groups/Environmental Groups
 - Industry
 - Media
- Information Vehicles
 - Press Release
 - Q&A Factsheet
 - Videotaped Announcement
 - Community Information Center
 - Web Page
- Activities/Events
 - Open House/Availability Sessions
 - Media Day

☐ SCHEDULE

- Implementation 60days after Communication Strategy.
- Survey periods May/June or October/November.
- Draft Report 120days after completion of Survey.

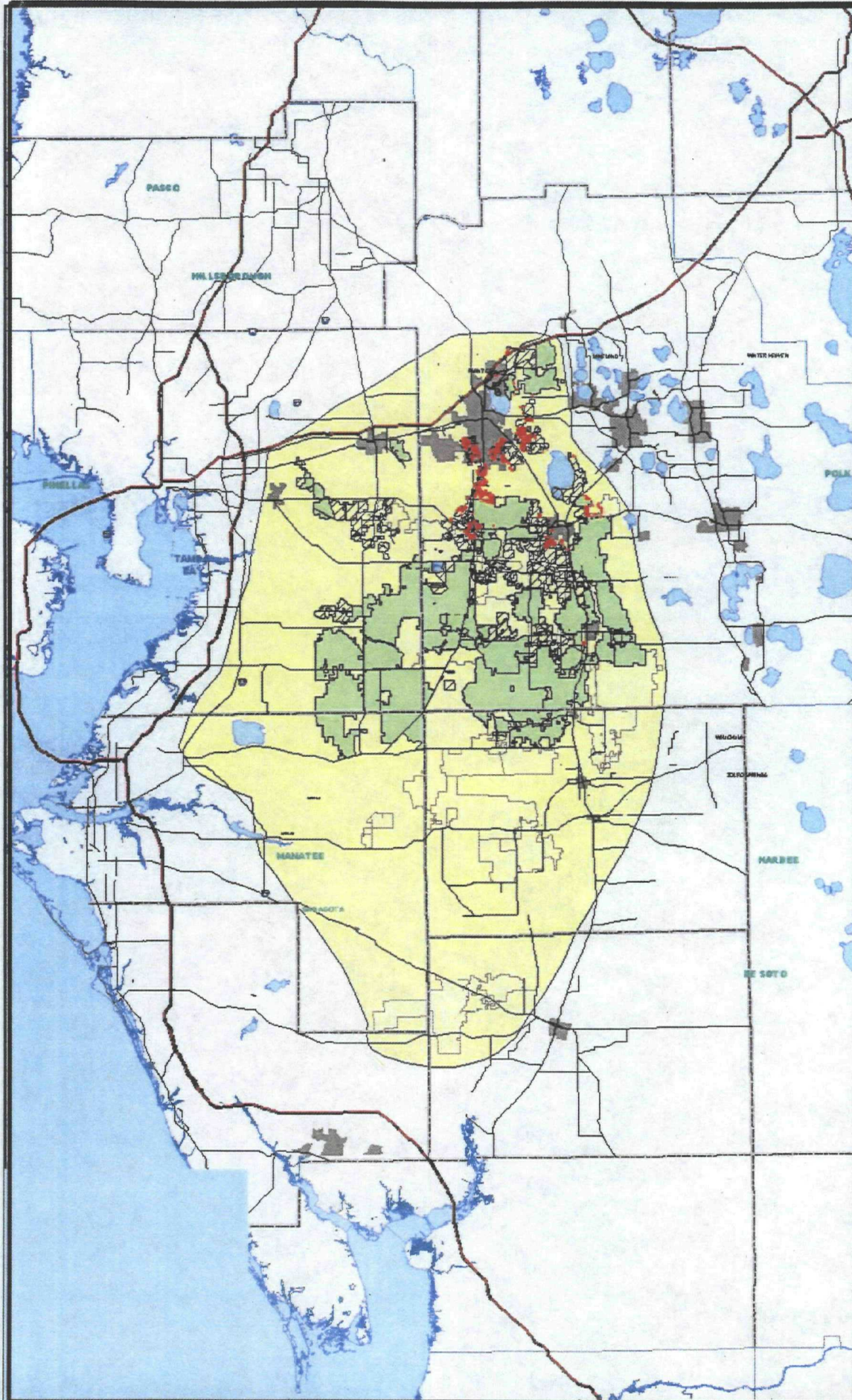
☐ NEXT STEPS

- Finalized Communication Strategy/Proceed with Implementation
- EPA/State Briefing of Results
- Public Release of Results
- Community Outreach/Involvement
- Follow-up Studies
- Enforcement Planning

Florida Phosphate Mines

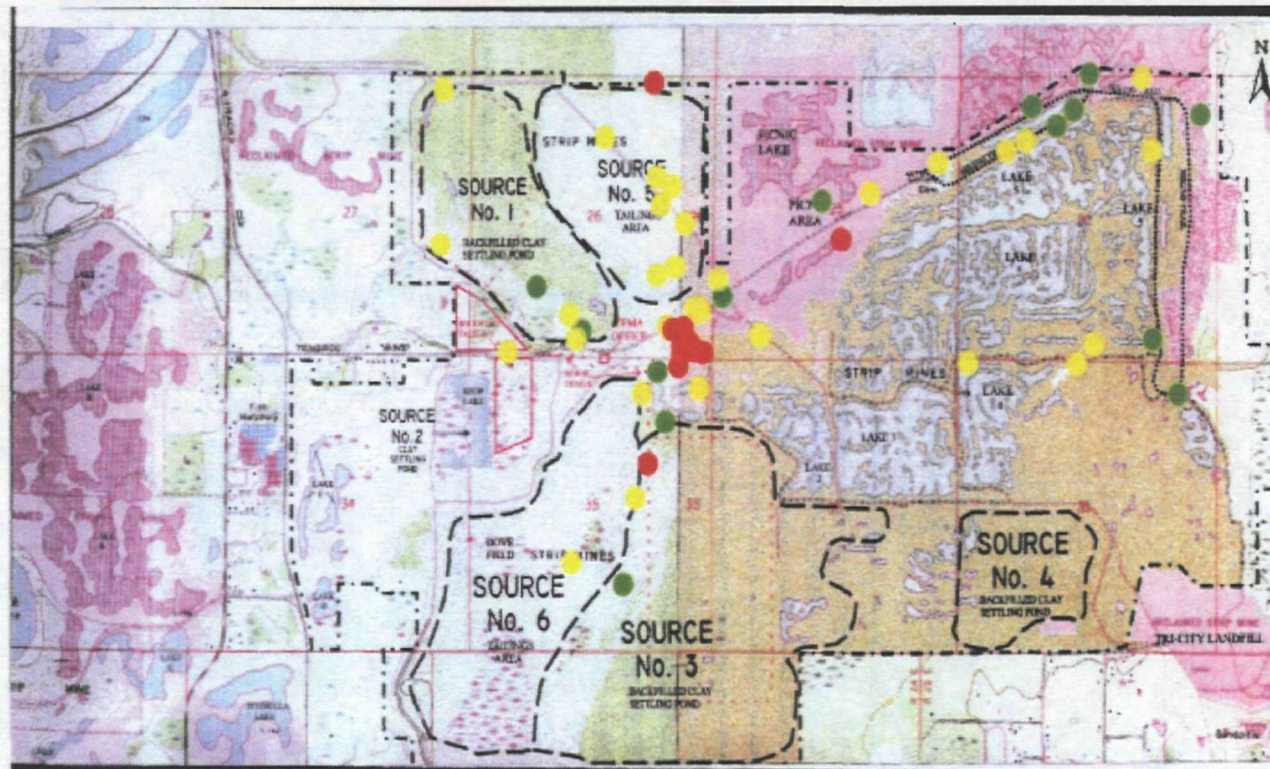
Legend

- All Mines Intersection
- Cerolis Intersection
- Nonmandatory
- Interstates
- County Line
- Cerolis Mining Sites
- Nonmandatory
- Towns
- Water Bodies
- Mandatory Mines
- Mineable Limit
- Counties

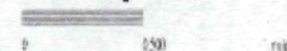


All data has been taken from the Florida Bureau of Water Resources

BORDEN CHEMICAL COMPANY / TENOROC MINE RADIATION MEASUREMENT LOCATIONS



Map Scale



Legend

- < 15 mRem/yr
 ● > 15 and < 100 mRem/yr
 ● > 100 and < 500 mRem/yr
 ● > 500 mRem/yr
 - - - - - Site Boundaries
 ——— Source Areas



U.S. EPA, August 6 - Jan 27, 1990

This image is an adaptation of Fig. 2 in the report of July 25, 2001 prepared for the U.S. EPA by Tetra Tech EM Inc.

EVALUATION CRITERIA FOR GAMMA RADIATION

Risk/Dose Based Criteria:

Agency/Criteria	Radiation Dose	Approx. Risk
EPA: NCP Risk Range [OSWER Guid. 8/97]	~ 0.05 to 15 mrem/yr	10^{-6} to 3×10^{-4}
ATSDR, DOE, Most States, NRC ¹ to the General Public	100 mrem/yr	2×10^{-3}
FDH Standard	20 uR/hr [including bkgd]	NA
NCRP for TENORM	500 mrem/yr	1×10^{-2}

1 - NRC & DOE use 100 mRem/yr for all pathways/doses, but for cleanup of radiation sources 25 mrem/yr is applied.

ARAR FOR REMEDIATION OF SOIL CONTAMINATED WITH RADIONUCLIDES

Agency/Criteria	Concentration (pCi/g) & Exposure Rate	Approx. Risk [from generic PRGs]
40 CFR 192	5 > bkgd & 20 uR/hr > bkgd	5pCi/g ~ 4×10^{-4}

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